

REMARKS

Summary of the Final Office Action

Claims 7-17 stand withdrawn from consideration.

Claims 3 and 4 stand rejected under 35 U.S.C. § 112, first paragraph as allegedly failing to comply with the written description requirement.

Claims 1, 3-6 and 18 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,224,264 to Takahashi et al. (hereinafter "Takahashi").

Claims 1 and 2 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,249,520 to Andris et al. (hereinafter "Andris").

Claims 1, 3, 5, 6 and 18 stand rejected under 35 U.S.C. § 102(b) as being anticipated by IBM Technical Disclosure Bulletin NN75012226 (hereinafter "IBM Technical Disclosure Bulletin").

Summary of the Response to the Office Action

Applicants traverse the outstanding rejections for the following reasons. Accordingly, claims 1-18 remain currently pending with claims 1-6 and 18 currently under consideration.

Rejections under 35 U.S.C. § 112, First Paragraph

Claims 3 and 4 stand rejected under 35 U.S.C. § 112, first paragraph as allegedly failing to comply with the written description requirement. This rejection is respectfully traversed for at least the following reasons. In the Office Action, the Examiner notes that he "could not find support for a blocking portion at the periphery of the pass through aperture."

Applicants respectfully submit that the associated features of claims 3 and 4, as amended in the previously-filed Amendment on September 22, 2006, of a “blocking portion on the periphery of the pass-through aperture” are described, for example at page 10, line 4 and lines 6-10 of the specification, as well as in connection with the illustrations of Figs. 1 and 2, of the instant application’s disclosure.

More particularly, Applicants respectfully submit that these portions of the specification describe that a blocking portion 30a is comprised of a periphery portion 30b and a recessed portion 30c. The recessed portion is described as being enclosed by the periphery portions 30b. See, for example, page 10, lines 6-10 and Figs. 1 and 2 of the instant application’s disclosure in this regard. In addition, there is also disclosure in the instant application that the periphery portions 30b protrude at the peripheries of the pass-through apertures 31. See, for example, page 10, line 4 and Fig. 2 of the instant application’s disclosure in this regard. As a result, for at least the foregoing reasons, Applicants respectfully submit that the features of a blocking portion at the periphery of the pass through aperture, as particularly described in each of claims 3 and 4, are fully supported by the disclosure of the instant application.

Accordingly, Applicants respectfully submit that claims 3 and 4 fully comply with the requirements of 35 U.S.C. § 112, first paragraph. Accordingly, withdrawal of the rejections under 35 U.S.C. § 112, first paragraph are respectfully requested.

Rejections under 35 U.S.C. § 102(b)

Claims 1, 3-6 and 18 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Takahashi. Claims 1 and 2 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Andris. Claims 1, 3, 5, 6 and 18 stand rejected under 35 U.S.C. § 102(b) as being anticipated by

IBM Technical Disclosure Bulletin. At pages 3-4 of the Final Office Action, the Examiner alleges that the Applicants' arguments previously filed on September 22, 2006 in this application "did not challenge the fact that the structures of the applied references satisfy the structural limitations of the claims." Applicants do not concede with this assertion because specific structural distinctions were discussed at pages 8-9 of the Amendment previously filed on September 22, 2006. Nevertheless, while Applicants believe that the previously-filed remarks still apply in this application, Applicants nevertheless will now provide additional comments regarding specific structural distinctions between the claims of the instant application and the applied references as follows.

Applicants respectfully submit that independent claim 1 of the instant application describes a combination of features of an etching mask used for a plasma etching process of a thin film including "a blocking portion enclosed by the protruding periphery portion for covering a surface of the thin film other than those that are to be etched." Applicants respectfully submit that at least this feature is neither shown nor suggested by the applied art of record.

In that regard, Applicants note that an important aspect of embodiments of the disclosure of the instant application, as described, for example, in independent claim 1, is that the blocking portion prevents an intrusion of plasma particles into non-etching surfaces of the thin film. In other words, the mask of embodiments of the disclosure of the instant application, as described in independent claim 1, for example, not only includes protruding portions, but also prevents the plasma from entering into the non-etching areas. Applicants will now describe each of the applied references in turn to explain how the features of independent claim 1 are not disclosed, or even suggested, by the applied references.

Applicants respectfully submit that Takahashi merely discloses “a film carrier” for semiconductor devices or dies. The film carrier is utilized in the process of the T.A.B. (Tape Automated Bonding) method. See col. 1, lines 8-9 of Takahashi. Applicants have explained in detail in the previous response that Takahashi does not disclose an etching mask arrangement because it is directed to a film carrier arrangement and thus Takahashi does not have a blocking portion of an etching mask, as described in independent claim 1 of the instant application. Applicants respectfully submit that even assuming, strictly arguendo, that these previously-discussed differences between an etching mask vs. a film carrier arrangement are put to the side, Takahashi still does not disclose at least the “blocking portion” as structurally described in independent claim 1 of the instant application.

In this regard, Applicants respectfully submit that that by referring to Fig. 1(A) together with Fig. 1(C) of Takahashi, a semiconductor die or chip (IC: Integrated Circuit) is put or mounted through a device hole (f). See col. 1, lines 22-32 of Takahashi. Additionally, Applicants respectfully submit that outer lead holes (c) are provided for connection of the outside part of device. If there was a blocking portion in the Takahashi arrangement, as asserted by the Office Action, Applicants respectfully submit that the connection (i.e., wire-bonding) to the leads (d) could not be performed.

Applicants respectfully submit that Andris merely discloses a mask having hollows or openings. See Figs. 3 and 4 of Andris. Accordingly, the mask of Andris clearly does not include a blocking portion enclosed by the protruding periphery portions 30b, as described in independent claim 1 of the instant application.

Applicants respectfully submit that the IBM Technical Disclosure Bulletin discloses a non-contact mask having a raised standoff pad 14. Applicants respectfully submit that the IBM

Technical Disclosure Bulletin merely discloses that the mask is allowed to be "spaced away" from a semiconductor chip. Applicants respectfully submit that there is no teaching in the IBM Technical Disclosure Bulletin of a blocking portion enclosed by the protruding periphery portion, as specifically described in the combination of features of independent claim 1 of the instant application.

To the extent that the Examiner intends to maintain these rejections, the Examiner is specifically requested to respond to each of the above-discussed structural distinction arguments in detail in the next Office Communication. As described above, Applicants respectfully submit that the specific arrangements of embodiments of the disclosure of the instant application, as described in at least independent claim 1 of the instant application, are neither disclosed or suggested in the cited references. At least withdrawal of the finality of the outstanding rejection is respectfully requested for the foregoing reasons.

Accordingly, Applicants respectfully assert that the rejections under 35 U.S.C. § 102(b) should be withdrawn because none of Takahashi, Andris, or IBM Technical Disclosure Bulletin, taken separately as applied by the Office Action, teach or suggest each feature of independent claim 1, as amended. As pointed out in MPEP § 2131, "[t]o anticipate a claim, the reference must teach every element of the claim." Thus, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. v. Union Oil Co. Of California, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987)." Furthermore, Applicants respectfully assert that the dependent claims are allowable at least because of their dependence from independent claim 1, and the reasons set forth above.

CONCLUSION

In view of the foregoing discussion, Applicants respectfully request the withdrawal of all outstanding rejections and objections. Applicants submit that the pending claims are in condition for allowance, and respectfully request reconsideration and timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution. A favorable action is awaited.

EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

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